

REMARKS

This application has been reviewed in light of the Office Action dated October 3, 2003. Claims 1-34 are presented for examination. Claims 1, 3, 5, 6, 11, 12, 13, 14, 18, 20, 22, 23, and 29 have been amended to define more clearly what Applicants regard as their invention.¹ Claims 1, 3, 5, 6, 11, 12, 13, 14, 18, 20, 22, and 23 are in independent form. Favorable reconsideration is requested.

Claims 1-6, 8-10, and 28-34 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,586,872 B2 (Shibata). Claims 1-10, 28, and 31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,031,250 (Brandes et al.) in view of U.S. Patent RE37,183 E (Kawamura et al.). Claims 11, 18, and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,031,250 (Brandes et al.) in view of U.S. Patent RE37,183 E (Kawamura et al.) and U.S. Patent 6,465,954 B2 (Kerslick et al.). Claims 12-17 and 20-27 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,031,250 (Brandes et al.) in view

¹At least the amendment to Claim 29 has not been made for purposes related to patentability, and no change in scope is either intended or believed to be effected by that amendment.

of U.S. Patent RE37,183 E (Kawamura et al.) and U.S. Patent 6,465,954 B2 (Kerslick et al.).

A notable feature of the present invention is the use of a particular type of film on a surface of a substrate in an area except for a partial surface area of the substrate, wherein the film has a surface on which electron emitting devices are to be disposed. The film may be, for example, an antistatic film (Claims 1, 11, and 18), a sodium blocking film (Claims 3, 12, and 20), an insulating film (Claims 5, 13, and 22), or a SiO₂ film containing metal oxide (Claims 6, 14, and 23). The partial surface area of the substrate which does not have the film has an exposed surface on which a supporting frame (Claims 1, 3, 5, 6, 18, 20, 22, and 23) and/or getter film (Claims 11, 12, 13, 14, 18, 20, 22, and 23), are to be disposed.

Section 2 of the Office Action states that Shibata discloses an image display device (col. 3, lines 10-16) with an electron source 4 (Figure 2B) and an image display member 186 (Figure 20). In Figure 2B of Shibata, there is a precursor made of a substrate 1 and an insulating film 6. The film is a metallic oxide where the oxide is either nickel, iron, or cobalt and the principle component is silica (SiO₂). Moreover, the Office Action states, the film is a fine particle film (col. 4, lines 66 - col. 5, line 7), that may act as an anti-static, sodium blocking, and insulating film. According to the Office Action, the film

is on a surface of the substrate on a region where electron emitting devices are disposed, but not on a region of that surface which is to be coupled to the image display device.

However, nothing in Shibata would teach or suggest a precursor to an electron source, having a particular type of film on a surface of a substrate in an area except for a partial surface area of the substrate, wherein (a) the film having a surface on which electron emitting devices are to be disposed is an antistatic film, in the case of Claims 1, 11, and 18, a sodium blocking film, in the case of Claims 3, 12, and 20, an insulating film, in the case of Claims 5, 13, and 22, or a SiO₂ film containing metal oxide, in the case of Claims 6, 14, and 23, and (b) the partial surface area of the substrate which does not have the film has an exposed surface on which a supporting frame (in the case of Claims 1, 3, 5, 6, 18, 20, 22, and 23), a getter film, (in the case of Claims 11, 12, 13, and 14), or a supporting frame and a getter film (in the case of Claims 18, 20, 22, and 23), are to be disposed.

Brandes et al. is cited in the Office Action as disclosing an image display device (col. 1, lines 19-21) with an electron source 7 (Figure 1D) and an image display member (col. 13, lines 56-63). In Figure 1D, a precursor made of substrate 1 and a film made of silicon dioxide 2 is shown.

The Office Action (Section 4) alleges that “[t]he film is on a surface of the substrate at a region where electron emitting devices are disposed, but not a region of that surface which is to be coupled to the image display device...” However, in Figure 1D, film 2 appears to completely cover the substrate 1. Moreover, nothing in the specification of Brandes et al. is seen to teach or suggest the proposition that the film is on a surface of the substrate, but not a region of that surface which is to be coupled to the image display device. Therefore, Brandes et al. also does not teach or suggest the above-emphasized features of the independent claims.

Kawamura et al. is cited in the Office Action as teaching that “electroconductive metal oxide particles of tin, antimony, or indium (col. 5, lines 35-37) are included in the SiO₂ layer to create an anti-static film and to improve the strength of the film (col. 5, lines 63-64).”

Kerslick et al. is cited in the Office Action as disclosing that the getter material with a diamond film can be used to form the cathode (col. 2, lines 47-50) of a field emission device (col. 1, lines 45-46). The specified composition apparently allows for a smaller and simpler design (col. 2, lines 50-52).

However, Kawamura et al. and/or Kerslick et al. would not remedy the deficiencies of Brandes et al. That is, neither Kawamura et al. or Kerslick et al. teaches or

suggests a precursor having a film provided on a surface of the substrate in an area except for a partial surface area of the substrate, wherein the precursor has various ones of the above-discussed features (a) and (b), as are recited in the respective independent claims.

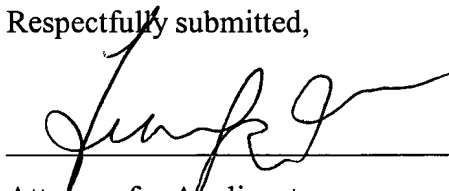
For the foregoing reasons, it is respectfully submitted that Claims 1, 3, 5, and 6 are each clearly patentable over Shibata. It also is respectfully submitted (a) Claims 1, 3, 5, and 6 are each clearly patentable over Brandes et al. and Kawamura et al., (b) Claims 11 and 18 are each clearly patentable over Brandes et al., Kawamura et al., and Kerslick et al., and (c) Claims 12, 13, 14, 20, 22, and 23 are each clearly patentable over Brandes et al., Kawamura et al., and Kerslick et al., whether those references are considered separately or in those respective combinations.

The other claims in this application are each dependent from one or another of the independent claims discussed above, and also are believed clearly patentable over the relevant art relied on by the Examiner, at least because the respective independent claim from which each depends, recites subject matter that is believed to be patentable over the prior art relied on by the Examiner. Nonetheless, individual reconsideration of each dependent claim on its own merits is respectfully requested.

In view of the foregoing remarks, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,



Attorney for Applicants

Registration No. 92476

FITZPATRICK, CELLA, HARPER & SCINTO

30 Rockefeller Plaza

New York, New York 10112-3801

Facsimile: (212) 218-2200

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